

IN THE CLAIMS:

Please cancel claims 1-19, 25, 29-33, 49, 50, 53-66 and 68, without prejudice.

Please amend the claims to read as follows:

21. (amended) An isolated nucleic acid encoding a soluble leptin receptor polypeptide which is OB-Re (SEQ ID NO:10), or allelic variants thereof.

22. (amended) An isolated nucleic acid encoding a leptin receptor (OB-R) polypeptide which is a soluble receptor.

24. (amended) An isolated DNA molecule encoding on expression a soluble leptin receptor polypeptide selected from the group consisting of:

- a. a DNA molecule of SEQ ID NO: 9;
- b. a DNA molecule complementary to the DNA molecule defined in (a);
- c. a DNA molecule which hybridizes under moderate stringency conditions to the DNA molecule of (a) or (b), or a hybridizable fragment thereof which encode on expression a soluble leptin receptor;
- d. a DNA molecule which is amplifiable with a polymerase chain reaction (PCR) probe selected from group consisting of a probe for clone 7 (forward primer SEQ ID NO:42 and reverse primer SEQ ID NO:43), a probe for clone 11 (forward primer SEQ ID NO:44 and reverse primer SEQ ID NO:45), and both clone 7 and clone 11; and
- e. a DNA molecule that codes on expression for the soluble leptin receptor polypeptide encoded by any of the foregoing DNA molecules.

27. (amended) The DNA molecule of claim 24 which codes on expression for a polypeptide selected from the group consisting of:

- a) a leptin receptor selected from the group consisting of OB-Re (SEQ ID NO:10), or allelic variants thereof; and

b) a leptin receptor comprising amino acids 28-805 of SEQ ID NO:10.

28. (amended) An isolated nucleic acid molecule having a nucleotide sequence corresponding or complementary to the DNA sequence set forth in SEQ ID NO: 9.

34. (amended) The nucleic acid of claim 21, 22 or 67 which is DNA.

67. (amended) The isolated nucleic acid of claim 22 wherein said soluble receptor is selected from the group consisting of

- a) OB-Re (SEQ ID NO:10), or allelic variants thereof; and
- b) a leptin receptor comprising amino acids 28-805 of SEQ ID NO:10.